

PRELIMINARY LISTS OF NEW ENGLAND PLANTS, — VIII.¹

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[The + sign indicates that an herbarium specimen has been seen; the sign — that a reliable printed record has been found.]

LOBELIACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
<i>Lobelia cardinalis</i> , L.	+	+	+	+	+	+
“ <i>Dortmanna</i> , L.	+	+	+	+	+	+
“ <i>inflata</i> , L.	+	+	+	+	+	+
“ <i>Kalmii</i> , L.	+	+	+	+	+	+
“ <i>spicata</i> , Lam.	+	+	+	+	+	+
“ <i>siphilitica</i> , L.	+	+	+	+	+	+

CAMPANULACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
<i>Campanula aparinoides</i> , Pursh.	+	+	+	+	+	+
“ <i>glomerata</i> , L.	+	+	+	+	+	+
“ <i>rapunculoides</i> , L.	+	+	+	+	+	+
“ <i>rotundifolia</i> , L.	+	+	+	+	+	+
<i>Jasione montana</i> , L.	+	+	+	+	+	+
<i>Specularia perfoliata</i> , A. DC.	+	+	+	+	+	+

DIAPENSIACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
<i>Diapensia lapponica</i> , L.	+	+	+			

¹Printed in RHODORA as supplementary material.

PLUMBAGINACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Statice Limonium, L. var. caroliniana, Gray.	+	+		+	+	+

PRIMULACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Anagallis arvensis, L.	+	+		+	+	+
Glaux maritima, L.	+	+		+		
Hottonia inflata, Ell.	+			+	+	+
Lysimachia Nummularia, L.	+	+	+	+	+	+
“ producta, Fernald	+	+	+	+		+
“ punctata, L.	+			+		+
“ quadrifolia, L.	+	+	+	+	+	+
“ stricta, Ait.	+	+	+	+	+	+
“ thyrsoflora, L.	+	—	+	+	+	+
“ vulgaris, L.	+	+		+	+	
Primula farinosa, L.	+					
“ mistassinica, Michx.	+		+			
Samolus Valerandi, L. var. americanus, Gray.	+		+	+	+	+
Steironema ciliatum, Raf.	+	+	+	+	+	+
“ lanceolatum, Gray.	+	—	+	+	+	+
Trientalis americana, Pursh.	+	+	+	+	+	+

EBENACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Diospyros virginiana, L.						+

OLEACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Fraxinus americana, L.	+	+	+	+	+	+
“ pennsylvanica, Marshall (<i>F. pubescens</i> , Lam).	+	+	+	+	+	+
“ pennsylvanica, Marshall, var. lanceolata, Sargent (<i>F. viridis</i> , Michx. f.)	+	+	+	+		+
“ sambucifolia, Lam.	+	+	+	+	+	+
Ligustrum vulgare, L.	+	—		+	+	+
Syringa vulgaris, L.	+	+	+	+	+	+

APOCYNACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Apocynum androsaemifolium, L.	+	+	+	+	+	+
“ cannabinum, L.	+	+	+	+	+	+
Vinca minor, L.	+		+			+

ASCLEPIADACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Acerates viridiflora, Ell.				—		+
Asclepias incarnata, L.	+	+	+	—		+
“ “ var. pulchra, Pers.	+	+		+	+	+
“ obtusifolia, Michx.		+	+	+	+	+
“ phytolaccoides, Pursh.	+	+	+	+	+	+
“ purpurascens, L.		—		+	+	+
“ quadrifolia, L.		+	+	+	+	+
“ syriaca, L. (<i>A. Cornuti</i> , Decaisne.)	+	+	+	+	+	+
“ tuberosa, L.		+	+	+	+	+
“ verticillata, L.				+	+	+
Vincetoxicum nigrum, Moench.			+	+	+	

SANTALACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Comandra livida, Richardson.	+	+	+			
“ umbellata, Nutt.	+	+	+	+	+	+

ORCHIDACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Aplectrum hiemale, Nutt.		—	+	+		+
→ Arethusa bulbosa, L.	+	+	+	+	+	+
Calopogon pulchellus, R. Br.	+	+	+	+	+	+
Calypso borealis, Salisb.	+	+	+			
→ Corallorhiza innata, R. Br.	+	+	+	+		+
“ multiflora, Nutt.	+	+	+	+	+	+
“ odontorhiza, Nutt.	+	—	+	+	+	+
→ Cypripedium acaule, Ait.	+	+	+	+	+	+
“ arietinum, R. Br.	+	+	+			
“ parviflorum, Salisb.	+	—	+	+		+
“ pubescens, Willd.	+	+	+	+	+	+
“ spectabile, Salisb.	+	—	+	+		+
Goodyera Menziesii, Lindl.	+					
“ pubescens, R. Br.	+	+	+	+	+	+
→ “ repens, R. Br. var. ophioides. Fernald.	+	+	+	+		+
→ “ tessellata, Loddiges.	+	+	+	+		+
Habenaria blephariglottis, Torr.	+	+	+	+	+	+
→ “ bracteata, R. Br.	+	+	+	+	+	+
“ ciliaris, R. Br.				+	+	+
“ dilatata, Gray.	+	+	+	+		+
“ fimbriata, R. Br.	+	+	+	+	+	+
“ Hookeriana, Gray.	+	+	+	+	+	+
“ “ var. oblongifolia, Paine.	+	+		+		
→ “ hyperborea, R. Br.	+	+	+	+		+
“ lacera, R. Br.	+	+	+	+	+	+
→ “ obtusata, Richardson.	+	+	+	+		
→ “ orbiculata, Torr.	+	+	+	+		+
→ “ psycodes, Gray.	+	+	+	+	+	+
→ “ tridentata, Hook.	+	+	+	+	+	+
“ virescens, Spreng.	+	+	+	+	+	+
Liparis liliifolia, Richard.		+	+	+		+

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
Liparis Loeselii, Richard.	+	+	+	+	+	+
Listera auriculata, Wiegand.	+	—	+			
“ convallarioides, Nutt.	+	+	+			
“ cordata, R. Br.	+	+	+	+	+	
Microstylis monophyllos, Lindl.	+	—	+	—		
“ ophioglossoides, Nutt.	+	+	+	+	+	+
Orchis rotundifolia, Pursh.	+		+			—
“ spectabilis, L.	+	+	+	+	+	+
Pogonia affinis, Austin.				+		+
“ ophioglossoides, Nutt.	+	+	+	+	+	+
“ pendula, Lindl.	+	+	+	—		+
“ verticillata, Nutt.	+	+	+	+	+	+
Spiranthes cernua, Richard.	+	+	+	+	+	+
“ gracilis, Bigelow.	+	+	+	+	+	+
“ latifolia, Torr.	+	+	+	+		+
“ praecox, Watson.				+	+	+
“ Romanzoffiana, Cham.	+	+	+			+
“ simplex, Gray.				+	+	+
Tipularia discolor, Nutt.				—		

NOTES UPON THE ABOVE LISTS. — Old and indefinite reports of plants, which I have been unable to verify by the most diligent inquiry, are purposely omitted. They are as follows :

Asclepias obtusifolia, Michx. — accredited to Maine — Portland Catalogue.

Asclepias quadrifolia, L. — accredited to Maine — Portland Catalogue.

Asclepias tuberosa, L. — accredited to Maine — Portland Catalogue.

Asclepias verticillata, L. — accredited to Maine — Portland Catalogue.

Fraxinus pennsylvanica, Marsh. var. *lanceolata*, Sargent. — accredited to R. I. — Bennett's List (as *F. viridis*).

Campanula rotundifolia, L. var. *arctica*, Lange, to which variety dwarf specimens from the alpine summits of the White Mountains have been referred by some botanists, is not admitted. In my opinion such specimens are but a reduced form of the type, due principally to soil and exposure.

Diospyros virginiana, L., has been accredited to Rhode Island in

some lists. I have omitted it, as I find on examination that the report is based upon a single tree of very doubtful origin, growing on a farm at Cumberland, Rhode Island.

Campanula glomerata, L., is still well established and thriving in the Danvers, Massachusetts, region, where it was reported more than fifty years ago. It seems strange that it has not obtained a foothold in other New England stations.

Jasione montana, L., has overrun Conanicut Island, Rhode Island, and it is likely to spread.

Syringa vulgaris, L., is such a persistent plant that it must be included in a list of plants growing without cultivation. I have seen it in a thriving condition, on old farmhouse sites in New Hampshire and Maine, abandoned fifty to one hundred years ago.

The Apocynums of New England require revision. It has therefore seemed to me best to follow the conservative treatment of Gray's Manual, until the abundant material which has been collected by others and myself can be studied by a competent authority.

Mr. Fernald collected a few years ago on waste land in Cambridge, Massachusetts, a few specimens of *Lobelia syphilitica*, L., one of which is now in the Gray Herbarium. As these plants were doubtless waifs, the species has not been noted in the lists as occurring in Massachusetts.

The record of *Hottonia inflata*, Ell., for Maine rests upon a single specimen collected near Mt. Agamenticus by Mr. John C. Parlin and now preserved in his herbarium. One branch was detached, and it is now in the herbarium of the writer.

The following orchids rest upon old and indefinite or else untrustworthy records. I have been unable to verify their occurrence, notwithstanding an examination of twenty or more of our principal herbaria, and the writing to scores of correspondents:

Aplectrum hiemale, Nutt. — accredited to Maine — Portland Catalogue.

Liparis liliifolia, Richard. — accredited to Maine — Portland Catalogue.

Spiranthes praecox, Watson. — accredited to Maine — Portland Catalogue.

Cypripedium arietinum, R. Br. — accredited to Massachusetts — Amherst List.

Cypripedium arietinum, R. Br. — accredited to Connecticut — Bishop's List.

Cypripedium parviflorum, Salisb. — accredited to Rhode Island — Bennett's List

Goodyera repens, R. Br. var. *ophioides*, Fernald. — accredited to Rhode Island — Bennett's List.

Habenaria ciliaris, R. Br. — accredited to New Hampshire — Baldwin's Orchids of N. E.

Habenaria ciliaris, R. Br. — accredited to Vermont — Baldwin's Orchids of N. E.

(Likewise omitted in Brainerd, Jones & Eggleston's Flora of Vermont.)

Liparis liliifolia, Richards. — accredited to Rhode Island — Bennett's List.

Listera cordata, R. Br. — accredited to Connecticut — Bishop's List.

Orchis rotundifolia, Pursh. — accredited to New Hampshire — Baldwin's Orchids of N. E.

Pogonia pendula, Lindl. — accredited to Rhode Island — Bennett's List.

Tipularia discolor, Nutt. — accredited to Vermont — Baldwin's Orchids of N. E.

(This has been omitted likewise in the Flora of Vermont.)

It seems pertinent to call attention again to the great difference in value between the + sign, indicating that a specimen has been seen, and the — sign, which rests only upon a printed record. Unless this record can be backed up by an herbarium specimen, it can be accepted only with a certain amount of doubt.

Of the most recent segregations accredited to New England not one has been admitted in my list. They are based upon unreliable and inconstant characters. I am well acquainted with all of these variations, and in my opinion they are at best but forms which it is preposterous to erect into species.

Goodyera repens, R. Br., the European type of the species, which was accredited to Vermont in the recently issued Flora of Vermont, has been dropped. The specimens upon which the record was made agree better with the variety *ophioides* of Fernald.

Habenaria Hookeriana, Gray, var. *oblongifolia*, Paine, has been retained, although in the opinion of the writer the variety is not well enough marked, at least in our New England plants, to entitle it to recognition. Equally poor varieties might easily be made out of

mere leaf variations in *Habenaria orbiculata*, *H. obtusata*, *Orchis spectabilis*, etc., etc.

There is a single specimen of *Corallorhiza striata*, Lindl., in the herbarium of the University of Vermont, collected many years ago by Joseph Torrey — date and locality not given, according to ancient usage. The plant, however, is believed to have been collected near Burlington. Prof. L. R. Jones writes me: "We shall have to await its rediscovery before so crediting it in printed lists." I can but acquiesce in this wise suggestion.

Epipactis Helleborine, Crantz, was introduced in 1898, with some garden plants from New York State, at Stockbridge, Mass. It was hardly likely to persist, however, as it selected a hedge along the main street for a habitat.

Spiranthes Romanzoffiana, Cham. is reported to me on good authority as growing on Mt. Greylock, Massachusetts. As there is no published record of the fact, and I am unable to obtain specimens at present, I am obliged to omit it from my list until I can record it without the possibility of a doubt.

Orchis rotundifolia, Pursh, is accredited to Connecticut on the authority of Robbins, who collected it at Norfolk (Bishop's List). This report is very old and it may well be that the plant is now extinct in this town, where it has not been seen for many years.

I have been particularly impressed in the study of this interesting order of plants by the fact that the tenure of life of many of our rarer species of orchids is very insecure. It is evident that many of them such as *Pogonia affinis* and *pendula*, *Tipularia discolor*, *Aplectrum hiemale*, *Calypto borealis*, several *Cypripediums*, etc., survive in some of the New England States only in the most secluded localities. Even there they are doomed to early extinction in many instances, by the growing demands for timber, by forest fires and by the clearing of the land.

Such plants as Hitchcock, Robbins, Tuckerman, and others reported are seldom or never seen now in their former homes, but must be sought for in the few localities, if there are any, which have not yet been called upon to satisfy the insatiate maw of the pulp mill or to suffer the withering influence of an increasing population.

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